DOCUMENT RESUME

ED 250 282 SP 025 364

AUTHOR Cunningham, Donald J.
TITLE What Every Teacher Should Know about Semiotics.
PUB DATE Apr 84
NOTE 12p.; Paper presented at the Annual Meeting of the American Educational Research Association (New Orleans, LA, April, 1984).
PUB TYPE Speeches/Conference Papers (150) -- Viewpoints (120)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Abstract Reasoning; Cognitive Processes; *Concept Formation; *Educational Psychology; *Foundations of Education; Higher Education; Interdisciplinary Approach; Preservice Teacher Education; *Teacher Education Curriculum
IDENTIFIERS *Semiotics

ABSTRACT

Semiotics is the science of signs and the structures of signs within which meanings emerge. The process through which these sign structures are built up is called semiosis. Courses commonly taught as foundational to teacher trainers should be imbued with a specific semiotic emphasis. At a general level, teachers may be introduced to the notion of signs and the process of semiosis, and be sensitized to the structures and codes of experience which both they and their students are building as they operate in the world. Thus, the interconnectedness of the concepts taught in foundational courses may be recognized and clarified. This view directs the attention of teachers away from teaching specific bits of knowledge and focuses upon the cultivation of higher intellectual skills. While semiotics is not the only view which leads to this conclusion, it, unlike some others, provides some conceptual tools for analyzing these skills and provides insights into ways in which these skills may be nurtured. (JD)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED250282

What Every Teacher Should Know About Semiotics[1]

Donald J. Cunningham

Indiana University

Most teacher training curricula in this country include as a component, a set of courses variously labeled foundations, general education, introductory perspectives or some other equally obscure and misleading reference. At my university, for instance, all undergraduate students preparing for a teaching license are required to take professional education courses in each of the following areas: educational psychology, history and philosophy of education, curriculum, methods, multicultural perspectives and, to be in tune with the times, instructional computing. These courses, especially those in educational psychology, history and philosophy, and multicultural perspectives, are meant to treat issues which are of concern to all teachers, no matter at what grade level or in what subject matter they intend to teach. All teachers need to acquire a sound understanding of the children they are to teach, the function and purpose of education in American society, and the multitude of social, ethnic and racial contexts within which education is carried out. Thus these courses, in conjunction with laboratory and field experiences which support them, are intended to provide the foundation upon which a successful teaching career must be built.

---

[1]Paper presented in the Symposium "Semiotics as a Foundational Discipline for Education" (D. J. Cunningham, Chair & organizer) at the annual meeting of the American Educational Research Association, New Orleans, April, 1984.

SP 025 364

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Donald J. Cunningham
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
X This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

Having experienced some of the joys and sorrows associated with teaching foundation courses for a number of years, let me share some of the insights I have gained and suggest some revisions based upon my newly acquired interest in semiotics. I'll restrict my comments to courses in Educational Psychology since that is what I know the most about. The fact that I am less familiar with what passes for courses in history and philosophy of education and multicultural perspectives is a symptom of the problems I perceive.

Courses in Educational Psychology for teachers commonly treat the following areas:

1. Development, including physical, cognitive, emotional, personality and social development.
2. Learning, including presentations of behavioral, cognitive and sometimes humanistic approaches to the learning.
3. Measurement and evaluation, including the construction of teacher made tests and the use of standardized tests.
4. Motivation, again usually from both behavioral and cognitive perspectives, and,
5. The teaching process, including methods and techniques of classroom organization, questioning, etc.

Additional topics often include defining educational objectives, task analysis, research methods, the scientific method and, of course, a thorough dose of the individual instructor's own theoretical biases. A colleague of mine who is very interested in counseling techniques spends a large amount of time training his students in these techniques. Another

colleague is a staunch advocate of simulations and games and includes a major unit in his course on this technique.

Do the topics usually treated in such courses allow the conclusion that there is such a thing as a "discipline" of Educational Psychology? It is my sense that students who have been submitted to these foundational courses would agree with David Ausubel who wrote that these courses convey the impression of educational psychology as

> "... a superficial, ill-digested, and typically disjointed and watered down miscellany of general psychology, learning theory, developmental psychology, social psychology, psychological measurement, psychology of adjustment, mental hygiene, client-centered counseling and child-centered education." (Ausubel, 1968 pp3-4)

In other words, the degree to which ideas presented within most educational psychology courses (and by extension, between educational psychology courses and other foundational courses) are integrated into some cohesive framework is minimal. Inspection of introductory textbooks in this field shows that most are broadly eclectic: There is something there for everyone--a little bit of this, a smidgen of that--none of which is treated in sufficient detail to provide a solid foundation, in any sense of that word, for the teacher to build upon.

We may, for instance, introduce students to Piaget's views of cognitive development: that students at different stages of development show qualitative differences in intellectual ability. We carefully describe assimilation and accommodation and pronounce the teaching principle that instruction must be adapted to the developmental level of the child. Then we move

on to the next unit on, say cognitive approaches to learning and describe a memory system of short term and long term memories, elaborative processing, schemas and the like. And once again we propose a set of teaching principles for, say, insuring long term retention. At this point my students begin to look quizzedly at me and wonder what the relationship between cognitive development and cognitive learning theory is. Are these ideas building an integrated picture of the child? Let's add a third unit on, say, the construction of teacher-made tests. Again I carefully teach methods for constructing multiple choice items, essay items, rating scales and the like and present the principles that test items should measure the level of learning expected and that tests should be reliable and valid. By now my students, at least those who still care, are really confused. Which test items show schema level knowledge or are best suited for measuring formal operational processes? How can we integrate our needs to evaluate learning and development with the principles of test construction? Add another five or ten units and before long the students are awash in a sea of paradigms with few, if any, marker buoys to guide them.

The problem, as I see it, is a lack of attention within the field of Educational Psychology to what Ausubel has called integretative reconcilliation. Too often our courses are disjointed treatments of topics with no attempt to interconnect them. What does Bloom's taxonomy have to do with Gagne's varieties of learned capabilities and what do they have to do with Piaget's stages, memory models or test construction? The reasons for this lack of attention to the interconnectedness of concepts are too many and varied to be explored in detail here and my purpose is not to criticize textbook authors (some of my best friends are authors

of textbooks!). But I would like you to consider how quickly this problem multiplies itself when considered across other "foundation" courses. At my university, at least, educational psychology, history and philosophy of education and multicultural perspectives are taken during the same semester in what is called a cluster. But I wonder how cohesive a cluster they form. Consider the plight of these poor Indiana University sophomores who are simultaneously learning about cognitive development in one course, cultural differences in cognition in another course and philosophical views about fostering cognitive development in a third. Each course is taught independently and from perspectives that do not overlap very much. We lack any unifying theme within these courses which would facilitate the integration of ideas across disciplines and provide those students with the kind of foundation which could be the basis for teaching.

The title of this paper might suggest that I am going to recommend that we replace existing foundation courses with courses in semiotics or that we add Semiotics I and II to the required list. Be assured that I am resisting that temptation. The last thing teacher education needs is a new buzz word or fad. What I would like to suggest is more subtle and more feasible within existing curricula.

One of the things that surprised and delighted me when I first started reading about semiotics and attending meetings of semioticians was the ease with which professionals from widely diverse disciplines could communicate with one another. Anthropologists, archaeologists, medical doctors, architects, biologists, linguists, philosophers, literary critics, psychologists, mathematicians, circus ringmasters, etc. could all be found at these meetings sharing a common interest and communicating at a level I would have thought impossible. The degree to which semiotics

is a unifying paradigm is very impressive. The concept which promotes this ecumenicalism is, I believe, that of structure. Man operates in the world by building up a structure of experience through signs. Semiotics is the science which examines the structures which give rise to meaning and these structures can be found and examined in any discipline including education. The unifying concept which I propose will allow the integretion of concepts presented in foundational courses in teacher training curricula is that of structure in the many forms that that concept emerges in these existing courses.

Semiotics is the science of signs and the structures of signs within which meanings emerge. The process by means of which these sign structures are built up is called semiosis by Deely (1983) and others. Semiosis describes the process by means of which we operate in the world. We make sense of our world by organizing experiences, or, rather, by organizing signs of our experiences. It can even be argued that the mind itself is a system of signs (i.e., tokens) in which we have constructed a model of our world and by means of which we can make sense out of our experiences. The parallel between these concepts and those from modern cognitive psychology should be apparent and I have explored these parallels in another paper (Cunningham, 1982). But I want to argue here for the use of these concepts to revise the notion of educational foundations.

I recommend that each of the courses commonly taught as foundational to teacher trainers be imbued with a specific semiotic emphasis. Notice I am <u>not</u> recommending a course in semiotics but rather the inclusion of this perspective in existing courses, including incidently methods courses and courses in instructional computing. Again because I am most familiar with it, let me illustrate the nature of this approach first within an educational psychology course. I will conclude by speculating how the

approach will integrate the "foundational" experience for prospective teachers across their foundations courses.

Within educational psychology, attention to the structures of signs within which meanings emerge can have effects at two levels: 1) it can help prospective teachers themselves integrate the dizzying array of theories, models, approaches and methods to which we typically expose them and 2) it can sensitize them to the variety of cognitive, emotional and social structures they can expect to find within the students they will teach.

With respect to the first effect, a semiotic perspective will force an explicit consideration of the interconnectedness of concepts and ideas within the realm of educational psychology. If our goal is to understand the child we teach, we must understand the structures of signs with which they operate. Piaget's work is rather explicit about these sign structures and how they change over time but nearly every other topic can also be treated from this common perspective. Script and schema theory from cognitive psychology are obvious examples where attention to sign structures is possible. But even so seemingly as diverse areas as operant conditioning, personality development, classroom organization, tests and measurements, and so on, can and should be analyzed from this semiotic perspective.

Take operant conditioning, for example: I, for one, like to make sure that my students go into their teaching experiences armed with an arsenal of behavior modification techniques. Discipline is a primary concern of most of my students (except the football players). Most treatments of operant conditioning principles are entirely isolated from any discussion of Piaget, memory models, personality, etc. Yet I would argue that operant conditioning can easily be considered as a technique

for creating a structure of signs within which the teacher and student can operate. Most behavior modification programs start with the statement of rules of proper conduct and either demonstrations or verbal descriptions of the consequences of rule following or disobeying. Even when the rules are not explicitly stated, the arrangement of contingencies for behavior modification are done with some structure of rules in mind. While I am sure Skinner would not approve of my interpretation of operant conditioning, I think the value of this interpretation derives from the fact that prospective teachers learning the content of educational psychology can better integrate operant concepts within an overall semiotic perspective than they could in a typical isolated treatment of the topic.

The second effect of a semiotic perspective within an educational psychology course is that prospective teachers will become more sensitive to the process of semiosis operating within the students they are teaching. A common misconception of prospective teachers is that they are to teach children things they need to know, that to teach is to increase students' knowledge of subjects like history or mathematics or skills like woodworking or typing. The recent recommendations by various organizations to lengthen the school year and day also seems compatible with this view. If children are not learning enough "stuff" then we need more time to "stuff" more in. A semiotic perspective, on the other hand, promotes the view of teaching as facilitating the ongoing process of semiosis; that is, students are throughout their lives organizing and structuring signs of their experiences. The job of the teacher is to nurture those processes along lines compatible with the subject being taught. If students are constantly being taught disjoint and unintegrated items of "stuff"

(just as our prospective teachers were in Educational Psychology courses), they cannot build the structures we seek. But if we emphasize those structures and the skills for building them, I think education becomes a more quality experience for both student and teacher. Thus we should be encouraging our prospective teachers to teach not the five causes of the civil war but techniques for analyzing historical events, not the ten major exports of France but techniques of geographical and economic analysis. In short, a semiotics perspective encourages prospective teachers to attend to the skills of learning subject matters rather than the learning of "stuff" about subjects (see Cunningham, 1983 for a more complete discussion of this issue).

The value of a semiotic perspective is even more apparent when I look across the typical foundation courses of teacher education curricula. Consider, for example, our required course at Indiana University in multicultural perspectives. We live in a pluralistic society and prospective teachers should be aware of the likely differences they may expect from urban or rural children; white, black, Indian or Mexican-American children; lower class or upper class children, etc. Yet once again these differences can be analyzed in terms of the structures of signs which these children have build up through experience. Anthropologists have for years now been analyzing cultures in terms of the structures (cognitive, social, etc.) within which meanings which are important for that culture emerge. Levi-Strauss in particular has championed this structuralist view of societies and their "rules." How much more rewarding would be the task of our prospective teachers if they could see strong interconnectedness between their study of cultural similarities and differences and the structures of experience which they should be nurturing in their classrooms.

What should every teacher know about semiotics? Please note that I am not proposing that our prospective teachers become semiotic scholars and read extensively the works of Peirce, Eco, Sebeok, Deely and others. I am not recommending that prospective teachers must be able to recognize or give examples of icons, indices and/or symbols in their teaching specialities. The arguments over theoretical matters within semiotics should be left to the semioticians. Yet at a general level, teachers may be introduced to the notion of signs and the process of semiosis, be sensitized to the structures and codes of experience which both they and their students are building as they operate in the world. This view then directs the attention of teachers away from teaching specific bits of knowledge to the cultivation of higher intellectual skills. While semiotics is not the only view which leads to this conclusion, it, unlike some others, provides us with some conceptual tools for analyzing these skills and insights into ways in which they may be nurtured. But that is a topic for another day.

References

Ausubel, D. P. Educational Psychology: A cognitive view. New York: Holt, Rinehart & Winston, Inc. 1968.

Cunningham, D. J. Organic schooling: A semiotic approach. In Deely, J. and Lenhart, M. (Eds). Semiotics 1982 (In press).

Cunningham D. J. On representation. In Deely, J. and Lenhart, M. (Eds). Semiotics, 1983 (In press).

Cunningham, D. J. Education as the cultivation of higher mental processes. Paper presented at the fourth International Institute for Semiotic and Structural Studies, Bloomington, IN, June 1983.

Deely, J. Introducing Semiotic. Bloomington, IN: Ind. Univ. Press 1983.